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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,080	09/04/2001	Junko Fukuda	213304US6	1165

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EXAMINER	
CASCHERA, ANTONIO A	
ART UNIT	PAPER NUMBER
2628	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/05/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/05/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/944,080	FUKUDA ET AL.	
	Examiner	Art Unit	
	Antonio A. Caschera	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-9,11,13-17,19,21-25,27 and 29-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-9,11,13-17,19,21-25,27 and 29-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 5, 7-9, 13, 15-17, 21, 23-25, 29, 31, 33, 35, 37, 39, 41 and 43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Miyagawa et al. (U.S. Patent 5,594,619) and further in view of Crooks et al. (U.S. Patent 5,208,736).

In reference to claims 1, 9, 17 and 25, Bird discloses a compact computer having a base (main body) with a keyboard and a display screen (comprised within a screen housing, #18 of Figure 3) pivotally connected to the base so that it can fold inwards towards the base (see Figure 1, equivalent to the closed position of Applicant's claims) or into a position where the display screen faces the keyboard (see Figure 2). Bird also discloses a first operating means operable by way of a numeric keypad (see column 5, lines 9-13 and #40 of Figures 2 and 3). Note, such a keypad is provided separate from the keyboard and adjacent to the keyboard and is operable in at least the mode wherein the display screen faces the keyboard (see Figure 2 and note Applicant's

amended claim language of "or" in the "first operating means" limitation of the claims). Bird does not explicitly disclose the display unit rotating in a turning direction different from the open/close directions however Miyagawa et al. does. Miyagawa et al. discloses a portable computer comprising a keyboard comprised within a main body case (see #29 of Figure 6A) and a display within an upper case (see #25 of Figure 6A) (see column 1, lines 18-20 and column 5, lines 52-59). Miyagawa et al. discloses the display and upper unit to open/close in a folding direction along with moving in a rotating direction which is different from the open/close folding direction (see column 6, lines 9-26, column 16, lines 16-34 and Figures 7A, 34-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the pivoting display configuration techniques of Miyagawa et al. with portable computing device techniques of Bird in order to allow the user of a portable computing device to operate the device in a more intuitive manner while providing a compact design (see column 1, lines 28-31 and column 17, lines 5-12 of Miyagawa et al.). Neither Bird nor Miyagawa et al. explicitly disclose either the first or second operating means provided on the display unit. Crooks et al. discloses a trackball mounted on a display housing (see column 2, lines 51-52 and #20 of Figure 1). Note, the Office interprets that the combination of Bird, Miyagawa et al. and Crooks et al. discloses that the second operating means, or display mounted trackball, would be operable when the display screen is in the turned/rotated position. Further, the above combination teaches that the first operating means or keypad of Bird and display mounted trackball of Crooks et al. are positioned on the same side of the display body in an open position and when the display is rotated and pivoted as in Miyagawa et al., the display mounted trackball is positioned on the opposite left or right side of the display screen as the keypad (see Figure 2 of

Bird and Figure 1 of Crooks et al. where both operating means are on the same (right side) of the display and then when the display pivoted (Figures 34-36 of Miyagawa et al.) appear on opposite sides). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the display unit including the trackball operating means of Crooks et al. with the pivoting display of Miyagawa et al. and portable computing device techniques of Bird in order to supply a device operating means when the device is in the above mentioned "rotated" position which reduces discomfort and fatigue while keeping an intuitive operating control (see columns 2-3, lines 64-3 of Crooks et al.).

In reference to claims 5, 13, 21 and 29, Bird, Miyagawa et al. and Crooks et al. disclose all of the claim limitations as applied to claims 1, 9, 17 and 25 respectively above in addition, the Office interprets that the first operating means, or keypad of Bird, is inherently capable of being "pressed." Further, Crooks et al. discloses the trackball capable of being rotated and further comprising of two select buttons which can pressed (see column 4, lines 13-29 and 33-37).

In reference to claims 7, 8, 15, 16, 23, 24, 31, 33 and 35, Bird, Miyagawa et al. and Crooks et al. disclose all of the claim limitations as applied to claims 1, 9, 17 and 25 above. Neither Bird, Miyagawa et al. nor Crooks et al. explicitly disclose the selection of processing items configured to control at least one of an external monitor output, a television output, screen luminance, and output volume. It is well known in the art of computer processing to implement some type of menu comprising processing items to configure all aspects of the computer including input/output devices. Menus and selectable processing items are used as an interface between the user and computer in order to instruct the computer to perform desired user functions (Official Notice). Therefore, it would have been obvious to one of ordinary skill in the

art for Bird, Miyagawa et al. and Crooks et al., who disclose utilizing computing devices including computer input/output devices, to implement selectable processing items allowing for the control of devices such as external monitor output, television output, screen luminance and output volume, because it is well known in the art that menus and graphical user interfaces are used in computers to create selectable items to execute functions desired by user operators. Further, since Bird, Miyagawa et al. and Crooks et al. all disclose the use of a portable computer (see column 2, lines 5-15 of Bird, column 1, lines 18-20 of Miyagawa et al. and column 1, lines 7-10 of Crooks et al), the Office interprets that each reference inherently discloses some element that is functionally equivalent to the display control means of Applicant's claims, since portable computers are well-known to execute an operating system program showing a system menu (Official Notice).

In reference to claims 37, 39, 41 and 43, Bird, Miyagawa et al. and Crooks et al. disclose all of the claim limitations as applied to claims 1, 9, 17 and 25 respectively above. Bird discloses a first operating means operable by way of a numeric keypad (see column 5, lines 9-13 and #40 of Figures 2 and 3). Crooks et al. discloses a trackball mounted on a display housing (see column 2, lines 51-52 and #20 of Figure 1). Neither Bird, Miyagawa et al., nor Crooks et al. specifically disclose the second operating means as a control dial and allowing the keypad to only display a system menu. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement a control dial instead of a trackball in Crooks et al. along with creating specific keys on the keypad to perform explicit functions. Applicant has not disclosed that a specific type, control dial, operating means and explicit function keys provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill

in the art, furthermore, would have expected Applicant's invention to perform equally well with the keypad of Bird and trackball of Crooks et al. because both of these operating means are operable in "photographic" (rotated) and "normal" device operating modes and the specific implementation of operating control is a matter which is not seen as providing any immediate criticality to the application at hand since it would rest at the discretion of the designer. Therefore, it would have been obvious to one of ordinary skill in this art to modify the combination of Bird, Miyagawa et al. and Crooks et al. to obtain the invention as specified in claims 37-44. Further, since Bird, Miyagawa et al. and Crooks et al. all disclose the use of a portable computer (see column 2, lines 5-15 of Bird, column 1, lines 18-20 of Miyagawa et al. and column 1, lines 7-10 of Crooks et al), the Office interprets that each reference inherently discloses some element that is functionally equivalent to the display control means of Applicant's claims, since portable computers are well-known to execute an operating system program showing a system menu (Official Notice).

3. Claims 3, 6, 11, 14, 19, 22, 27, 30, 32, 34, 36, 38, 40, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bird (U.S. Patent 5,341,154), Miyagawa et al. (U.S. Patent 5,594,619), Crooks et al. (U.S. Patent 5,208,736) and further in view of Isashi (U.S. Patent 5,898,600).

In reference to claims 3, 11, 19 and 27, Bird discloses a compact computer having a base (main body) with a keyboard and a display screen (comprised within a screen housing, #18 of Figure 3) pivotally connected to the base so that it can fold inwards towards the base (see Figure 1, equivalent to the closed position of Applicant's claims) or into a position where the display screen faces the keyboard (see Figure 2). Bird also discloses a first operating means operable by

way of a numeric keypad (see column 5, lines 9-13 and #40 of Figures 2 and 3). Note, such a keypad is provided separate from the keyboard and adjacent to the keyboard and is operable in at least the mode wherein the display screen faces the keyboard (see Figure 2 and note Applicant's amended claim language of "or" in the "first operating means" limitation of the claims). Bird does not explicitly disclose the display unit rotating in a turning direction different from the open/close directions however Miyagawa et al. does. Miyagawa et al. discloses a portable computer comprising a keyboard comprised within a main body case (see #29 of Figure 6A) and a display within an upper case (see #25 of Figure 6A) (see column 1, lines 18-20 and column 5, lines 52-59). Miyagawa et al. discloses the display and upper unit to open/close in a folding direction along with moving in a rotating direction which is different from the open/close folding direction (see column 6, lines 9-26, column 16, lines 16-34 and Figures 7A, 34-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the pivoting display configuration techniques of Miyagawa et al. with portable computing device techniques of Bird in order to allow the user of a portable computing device to operate the device in a more intuitive manner while providing a compact design (see column 1, lines 28-31 and column 17, lines 5-12 of Miyagawa et al.). Neither Bird nor Miyagawa et al. explicitly disclose either the first or second operating means provided on the display unit. Crooks et al. discloses a trackball mounted on a display housing (see column 2, lines 51-52 and #20 of Figure 1). Note, the Office interprets that the combination of Bird, Miyagawa et al. and Crooks et al. discloses that the second operating means, or display mounted trackball, would be operable when the display screen is in the turned/rotated position. Further, the above combination teaches that the first operating means or keypad of Bird and display mounted

trackball of Crooks et al. are positioned on the same side of the display body in an open position and when the display is rotated and pivoted as in Miyagawa et al., the display mounted trackball is positioned on the opposite left or right side of the display screen as the keypad (see Figure 2 of Bird and Figure 1 of Crooks et al. where both operating means are on the same (right side) of the display and then when the display pivoted (Figures 34-36 of Miyagawa et al.) appear on opposite sides). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the display unit including the trackball operating means of Crooks et al. with the pivoting display of Miyagawa et al. and portable computing device techniques of Bird in order to supply a device operating means when the device is in the above mentioned "rotated" position which reduces discomfort and fatigue while keeping an intuitive operating control (see columns 2-3, lines 64-3 of Crooks et al.). Neither Bird, Miyagawa et al. nor Crooks et al. explicitly disclose a photographing case having a photographing function however Isashi does. Isashi discloses a portable information processing apparatus comprising first and second members along with a hinge member (see column 2, lines 18-20). Isashi explicitly discloses the apparatus comprising of a camera lens mounted in the hinge member for use in a "photographic mode" or "rotated" position (see column 15, lines 55-61 and column 16, lines 32-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the photographic elements of Isashi with the trackball operating means of Crooks et al., pivoting display of Miyagawa et al. and portable computing device techniques of Bird in order to increase the "packing density" of portable devices thereby increasing the number of functions performed by such devices (see column 1, lines 13-23 of Isashi) which in turn creates more flexible and user friendly devices.

In reference to claims 6, 14, 22 and 30, Bird, Miyagawa et al., Crooks et al. and Isashi disclose all of the claim limitations as applied to claims 3, 11 and 19 respectively above in addition, the Office interprets that the first operating means, or keypad of Bird, is inherently capable of being "pressed." Further, Crooks et al. discloses the trackball capable of being rotated and further comprising of two select buttons which can pressed (see column 4, lines 13-29 and 33-37).

In reference to claims 32, 34 and 36, Bird, Miyagawa et al., Crooks et al. and Isashi disclose all of the claim limitations as applied to claims 19 and 27 above. Neither Bird, Miyagawa et al., Crooks et al. nor Isashi explicitly disclose the selection of processing items configured to control at least one of an external monitor output, a television output, screen luminance, and output volume. It is well known in the art of computer processing to implement some type of menu comprising processing items to configure all aspects of the computer including input/output devices. Menus and selectable processing items are used as an interface between the user and computer in order to instruct the computer to perform desired user functions (Official Notice). Therefore, it would have been obvious to one of ordinary skill in the art for Bird, Miyagawa et al., Crooks et al., and Isashi who both disclose utilizing computing devices including computer input/output devices, to implement selectable processing items allowing for the control of devices such as external monitor output, television output, screen luminance and output volume, because it is well known in the art that menus and graphical user interfaces are used in computers to create selectable items to execute functions desired by user operators. Further, since Bird, Miyagawa et al. and Crooks et al. all disclose the use of a portable computer (see column 2, lines 5-15 of Bird, column 1, lines 18-20 of Miyagawa et al.

and column 1, lines 7-10 of Crooks et al), the Office interprets that each reference inherently discloses some element that is functionally equivalent to the display control means of Applicant's claims, since portable computers are well-known to execute an operating system program showing a system menu (Official Notice).

In reference to claims 38, 40, 42 and 44, Bird, Miyagawa et al., Crooks et al. and Isashi disclose all of the claim limitations as applied to claims 3, 11, 19 and 27 respectively above. Bird discloses a first operating means operable by way of a numeric keypad (see column 5, lines 9-13 and #40 of Figures 2 and 3). Crooks et al. discloses a trackball mounted on a display housing (see column 2, lines 51-52 and #20 of Figure 1). Neither Bird, Miyagawa et al., Crooks et al. nor Isashi specifically disclose the second operating means as a control dial and allowing the keypad to only display a system menu. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement a control dial instead of a trackball in Crooks et al. along with creating specific keys on the keypad to perform explicit functions. Applicant has not disclosed that a specific type, control dial, operating means and explicit function keys provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the keypad of Bird and trackball of Crooks et al. because both of these operating means are operable in "photographic" (rotated) and "normal" device operating modes and the specific implementation of operating control is a matter which is not seen as providing any immediate criticality to the application at hand since it would rest at the discretion of the designer. Therefore, it would have been obvious to one of ordinary skill in this art to modify the combination of Bird, Miyagawa et al. and Crooks et al. to obtain the invention as specified in

claims 37-44. Further, since Bird, Miyagawa et al. and Crooks et al. all disclose the use of a portable computer (see column 2, lines 5-15 of Bird, column 1, lines 18-20 of Miyagawa et al. and column 1, lines 7-10 of Crooks et al), the Office interprets that each reference inherently discloses some element that is functionally equivalent to the display control means of Applicant's claims, since portable computers are well-known to execute an operating system program showing a system menu (Official Notice).

Response to Arguments

4. Applicant's arguments with respect to claims 1, 3, 5-9, 11, 13-17, 19, 21-25, 27 and 29-44 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

aac
2/23/07

Antonio Caschera
Patent Examiner

KEE M. TUNG
SUPERVISORY PATENT EXAMINER